

APR 19 2002

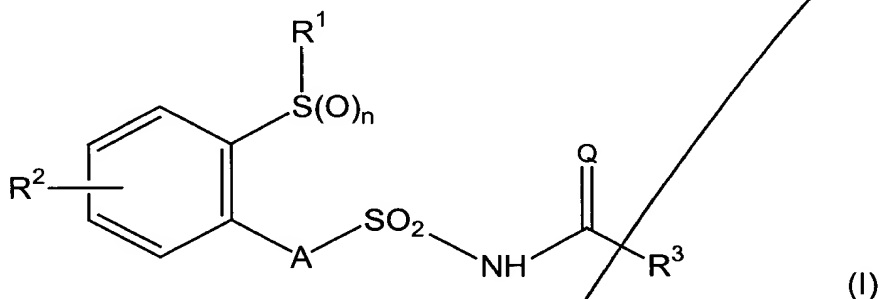
TECH CENTER 1600/2900

In the claims:

Please cancel claims 7 and 10-12 without prejudice.

Please amend the claims as follows:

1. (Amended) A sulfonylamino(thio)carbonyl of the formula (I)



wherein

n represents the number 0, 1 or 2,

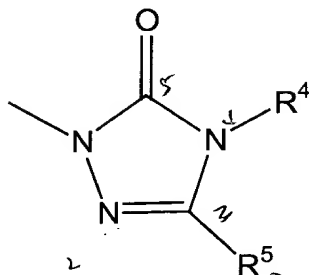
A represents a single bond, oxygen or sulfur, or the grouping N-R, wherein R represents hydrogen, alkyl, alkenyl, alkynyl or cycloalkyl,

Q represents oxygen or sulfur,

R¹ represents hydrogen, formyl or represents optionally substituted alkyl, alkoxy, alkylamino, alkoxyamino, dialkylamino, N-alkoxy-N-alkyl-amino, alkylcarbonyl, alkoxy carbonyl, alkylsulfonyl, alkenyl, alkynyl, cycloalkyl, cycloalkylcarbonyl or cycloalkylsulfonyl,

R² represents cyano, halogen or represents optionally substituted alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, dialkylaminosulfonyl, alkenyl, alkynyl, alkenyloxy or alkynyloxy, and

R^3 represents an optionally substituted heterocyclyl of the formula below, wherein



R^4 represents hydrogen, hydroxyl, amino or cyano, or represents C_2 - C_{10} -alkylideneamino, or represents optionally fluoro-, chloro-, bromo-, cyano-, C_1 - C_4 -alkoxy-, C_1 - C_4 -alkyl-carbonyl- or C_1 - C_4 -alkoxy-carbonyl-substituted C_1 - C_6 -alkyl, or represents optionally fluoro-, chloro- and/or bromo-substituted C_2 - C_6 -alkenyl or C_2 - C_6 -alkynyl, or represents optionally fluoro-, chloro-, bromo-, cyano-, C_1 - C_4 -alkoxy- or C_1 - C_4 -alkoxy-carbonyl-substituted C_1 - C_6 -alkoxy, C_1 - C_6 -alkylamino or C_1 - C_6 -alkyl-carbonylamino, or represents C_3 - C_6 -alkenyloxy, or represents di- $(C_1$ - C_4 -alkyl)-amino, or represents optionally fluoro-, chloro-, bromo-, cyano- and/or C_1 - C_4 -alkyl-substituted C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkylamino or C_3 - C_6 -cycloalkyl- C_1 - C_4 -alkyl, or represents optionally fluoro-, chloro-, bromo-, cyano-, nitro-, C_1 - C_4 -alkyl-, trifluoromethyl- and/or C_1 - C_4 -alkoxy-substituted phenyl or phenyl- C_1 - C_4 -alkyl,

R^5 represents hydrogen, hydroxyl, mercapto, amino, cyano, fluoro, chloro, bromo or iodo, or represents optionally fluoro-, chloro-, bromo-, cyano-, C_1 - C_4 -alkoxy-, C_1 - C_4 -alkyl-carbonyl- or C_1 - C_4 -alkoxy-carbonyl-substituted C_1 - C_6 -alkyl, or represents optionally fluoro-, chloro- and/or bromo-substituted C_2 - C_6 -alkenyl or C_2 - C_6 -alkynyl, or represents optionally fluoro-, chloro-, cyano-, C_1 - C_4 -alkoxy- or C_1 - C_4 -alkoxy-carbonyl-substituted C_1 - C_6 -alkoxy, C_1 - C_6 -alkylthio, C_1 - C_6 -alkylamino or C_1 - C_6 -

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alkylcarbonylamino, or represents C₃-C₆-alkenyloxy, C₃-C₆-alkynyloxy, C₃-C₆-alkenylthio, C₃-C₆-alkynylthio, C₃-C₆-alkenylamino or C₃-C₆-alkynyllamino, or represents di-(C₁-C₄-alkyl)-amino, or represents optionally methyl- and/or ethyl-substituted aziridino, pyrrolidino, ~~piperidino or morpholino~~, or represents optionally fluoro-, chloro-, bromo-, cyano- and/or C₁-C₄-alkyl-substituted C₃-C₆-cycloalkyl, C₅-C₆-cycloalkenyl, C₃-C₆-cycloalkyloxy, C₃-C₆-cycloalkylthio, C₃-C₆-cycloalkylamino, C₃-C₆-cycloalkyl- C₁-C₄-alkyl, C₃-C₆-cycloalkyl- C₁-C₄-alkoxy, C₃-C₆-cycloalkyl- C₁-C₄-alkylthio or C₃-C₆-cycloalkyl- C₁-C₄-alkylamino, or represents optionally fluoro-, chloro-, bromo-, cyano-, nitro-, C₁-C₄-alkyl, trifluoromethyl-, C₁-C₄-alkoxy- and/or C₁-C₄-alkoxy-carbonyl-substituted phenyl, phenyl- C₁-C₄-alkyl, phenoxy, phenyl- C₁-C₄-alkoxy, phenylthio, phenyl- C₁-C₄-alkylthio, phenylamino or phenyl- C₁-C₄-alkylamino, or

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R⁴ and R⁵ together represent optionally branched alkanediyl having 3 to 11 carbon atoms, and salts thereof.

2. (Amended) The sulfonylamino(thio)carbonyl of claim 1, wherein

n represents the number 0, 1 or 2,

A represents a single bond, oxygen, sulfur, or the grouping N-R, in which R represents hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₃-C₆-cycloalkyl,

Q represents oxygen or sulfur,

R¹ represents hydrogen, formyl or represents optionally cyano-, fluoro-, chloro-, bromo-, phenyl- or C₁-C₄-alkoxy-substituted alkyl, alkoxy,

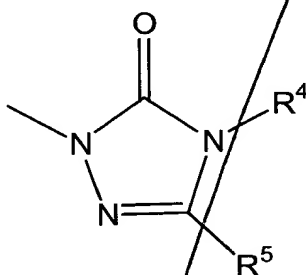
alkylamino, alkoxyamino, dialkylamino, N-alkoxy-N-alkyl-amino, alkylcarbonyl, alkoxy carbonyl, alkylsulfonyl, alkenyl or alkynyl having in each case up to 6 carbon atoms, or represents optionally cyano-, fluoro-, chloro-, bromo- or C₁-C₄-alkyl-substituted C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl-carbonyl or C₃-C₆-cycloalkyl-sulfonyl,

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R² represents cyano, fluoro, chloro or bromo or represents optionally cyano-, fluoro-, chloro-, bromo- or C₁-C₄-alkoxy-substituted alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, dialkylaminosulfonyl, alkenyl, alkynyl, alkenyloxy or alkynyloxy having in each case up to 6 carbon atoms, and

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R³ represents an optionally substituted heterocyclyl of the formula below,



wherein

R⁴ represents hydrogen, hydroxyl, amino or cyano, or represents C₂-C₁₀-alkylideneamino, or represents optionally fluoro-, chloro-, bromo-, cyano-, C₁-C₄-alkoxy-, C₁-C₄-alkyl-carbonyl- or C₁-C₄-alkoxy-carbonyl-substituted C₁-C₆-alkyl, or represents optionally fluoro-, chloro- and/or bromo-substituted C₂-C₆-alkenyl or C₂-C₆-alkynyl, or represents optionally fluoro-, chloro-, bromo-, cyano-, C₁-C₄-alkoxy- or C₁-C₄-alkoxy-carbonyl-substituted C₁-C₆-alkoxy, C₁-C₆-alkylamino or C₁-C₆-alkyl-carbonylamino, or represents C₃-C₆-alkenyloxy, or represents di-(C₁-C₄-alkyl)-amino, or represents optionally fluoro-, chloro-, bromo-,

cyano- and/or C₁-C₄-alkyl-substituted C₃-C₆-cycloalkyl, C₃-C₆-cycloalkylamino or C₃-C₆-cycloalkyl- C₁-C₄-alkyl, or represents optionally fluoro-, chloro-, bromo-, cyano-, nitro-, C₁-C₄-alkyl-, trifluoromethyl- and/or C₁-C₄-alkoxy-substituted phenyl or phenyl- C₁-C₄-alkyl,

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cont R⁵
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represents hydrogen, hydroxyl, mercapto, amino, cyano, fluoro, chloro, bromo or iodo, or represents optionally fluoro-, chloro-, bromo-, cyano-, C₁-C₄-alkoxy-, C₁-C₄-alkyl-carbonyl- or C₁-C₄-alkoxy-carbonyl-substituted C₁-C₆-alkyl, or represents optionally fluoro-, chloro- and/or bromo-substituted C₂-C₆-alkenyl or C₂-C₆-alkynyl, or represents optionally fluoro-, chloro-, cyano-, C₁-C₄-alkoxy- or C₁-C₄-alkoxy-carbonyl-substituted C₁-C₆-alkoxy, C₁-C₆-alkylthio, C₁-C₆-alkylamino or C₁-C₆-alkylcarbonylamino, or represents C₃-C₆-alkenyloxy, C₃-C₆-alkynyloxy, C₃-C₆-alkenylthio, C₃-C₆-alkynylthio, C₃-C₆-alkenylamino or C₃-C₆-alkynylamino, or represents di-(C₁-C₄-alkyl)-amino, or represents optionally methyl- and/or ethyl-substituted aziridino, pyrrolidino, ~~piperidino or morpholine~~, or represents optionally fluoro-, chloro-, bromo-, cyano- and/or C₁-C₄-alkyl-substituted C₃-C₆-cycloalkyl, C₅-C₆-cycloalkenyl, C₃-C₆-cycloalkyloxy, C₃-C₆-cycloalkylthio, C₃-C₆-cycloalkylamino, C₃-C₆-cycloalkyl- C₁-C₄-alkyl, C₃-C₆-cycloalkyl- C₁-C₄-alkoxy, C₃-C₆-cycloalkyl- C₁-C₄-alkylthio or C₃-C₆-cycloalkyl- C₁-C₄-alkylamino, or represents optionally fluoro-, chloro-, bromo-, cyano-, nitro-, C₁-C₄-alkyl-, trifluoromethyl-, C₁-C₄-alkoxy- and/or C₁-C₄-alkoxy-carbonyl-substituted phenyl, phenyl- C₁-C₄-alkyl, phenoxy, phenyl- C₁-C₄-alkoxy, phenylthio, phenyl- C₁-C₄-alkylthio, phenylamino or phenyl- C₁-C₄-alkylamino, or

R⁴ and R⁵ together represent optionally branched alkanediyl having 3 to 11 carbon atoms, and

the sodium, potassium, magnesium, calcium, ammonium, C₁-C₄-alkyl-ammonium, di-(C₁-C₄-alkyl)-ammonium, tri-(C₁-C₄-alkyl)-ammonium, tetra-(C₁-C₄-alkyl)-ammonium, tri-(C₁-C₄-alkyl)-sulfonium, C₅- or C₆-cycloalkyl-ammonium and di-(C₁-C₂-alkyl)-benzyl-ammonium salts thereof.

3. (Amended) The sulfonylamino(thio)carbonyl of claim 1, wherein

n represents the number 0, 1 or 2,

A represents a single bond, oxygen or the grouping N-R, in which R represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i- or s-butyl, propenyl, butenyl, propynyl, butynyl, cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl,

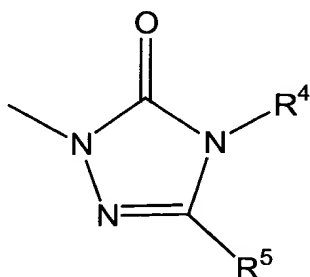
Q represents oxygen or sulfur,

R¹ represents hydrogen, formyl, or represents optionally fluoro-, chloro-, bromo-, methoxy- or ethoxy-substituted methyl, ethyl, n- or i-propyl, n-, i- or s-butyl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butylamino, methoxyamino, ethoxyamino, n- or i-propoxyamino, n-, i-, s- or t-butoxyamino, dimethylamino, diethylamino, N-methoxy-N-methylamino, acetyl, propionyl, butyryl, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, methylsulfonyl, ethylsulfonyl, n- or i-propylsulfonyl, n-, i-, s- or t-butylsulfonyl, propenyl, butenyl, propynyl or butynyl, or represents optionally fluoro-, chloro- or methyl-substituted cyclopropyl, cyclopropylcarbonyl or cyclopropylsulfonyl,

R² represents cyano, fluoro, chloro or bromo, or represents optionally fluoro-, chloro-, methoxy- or ethoxy-substituted methyl, ethyl, n- or i-propyl, n-, i- or s-butyl, methoxy, ethoxy, n- or i-propoxy, n-, i- or s-

butoxy, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, dimethylaminosulfonyl or diethylaminosulfonyl, or represents propenyl, butenyl, propynyl, butynyl, propenyloxy, butenyloxy, propynyloxy or butynyloxy, and

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 R^3 represents an optionally substituted heterocyclyl of the formula below:



wherein

R^4 represents hydrogen, hydroxyl or amino, or represents C_3 - C_8 -alkylideneamino, or represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, or represents optionally fluoro-, chloro- or bromo-substituted propenyl, butenyl, propynyl or butynyl, or represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butylamino, or represents propenyloxy or butenyloxy, or represents dimethylamino or diethylamino, or represents optionally fluoro-, chloro-, methyl- and/or ethyl-substituted cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylamino, cyclobutylamino, cyclopentylamino, cyclohexylamino, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl or cyclohexylmethyl, or represents optionally fluoro-, chloro-, methyl-, trifluoromethyl- and/or methoxy-substituted phenyl or benzyl,

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R⁵ represents hydrogen, hydroxyl, mercapto, amino, fluoro, chloro or bromo, or represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, or represents optionally fluoro-, chloro- or bromo-substituted ethenyl, propenyl, butenyl, propynyl or butynyl, or represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butylamino, or represents propenyloxy, butenyloxy, propynyloxy, butynyloxy, propenylthio, propadienylthio, butenylthio, propynylthio, butynylthio, propenylamino, butenylamino, propynylamino or butynyl amino, or represents dimethylamino, diethylamino or dipropylamino, or represents optionally fluoro-, chloro-, methyl- and/or ethyl-substituted cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopentenyl, cyclohexenyl, cyclopropyloxy, cyclobutyloxy, cyclopentyloxy, cyclohexyloxy, cyclopropylthio, cyclobutylthio, cyclopentylthio, cyclohexylthio, cyclopropylamino, cyclobutylamino, cyclopentylamino, cyclohexylamino, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl, cyclohexylmethyl, cyclopropylmethoxy, cyclobutylmethoxy, cyclopentylmethoxy, cyclohexylmethoxy, cyclopropylmethylthio, cyclobutylmethylthio, cyclopentylmethylthio, cyclohexylmethylthio, cyclopropylmethylamino, cyclobutylmethylamino, cyclopentylmethylamino or cyclohexylmethylamino, or represents optionally fluoro-, chloro-, methyl-, trifluoromethyl-, methoxy- and/or methoxycarbonylsubstituted phenyl, benzyl, phenoxy, benzyloxy, phenylthio, benzylthio, phenylamino or benzylamino, or

R⁴ and R⁵ together represent optionally branched alkanediyl having 3 to 11 carbon atoms.

4. (Amended) The sulfonylamino(thio)carbonyl of claim 1, wherein

n represents the number 0, 1 or 2,

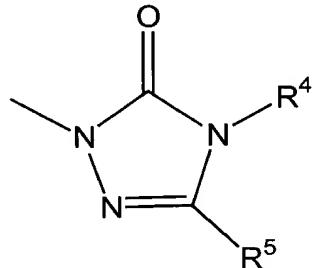
A represents a single bond,

Q represents oxygen or sulfur,

R¹ represents optionally fluoro- and/or chloro-substituted methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl,

B1 R² represents fluoro, chloro or bromo, or represents optionally fluoro-, and/or chloro-substituted methyl, ethyl, methoxy, ethoxy, methylthio or ethylthio - in each case in position 6 -, and

R³ represents an optionally substituted triazolinyI of the formula below,

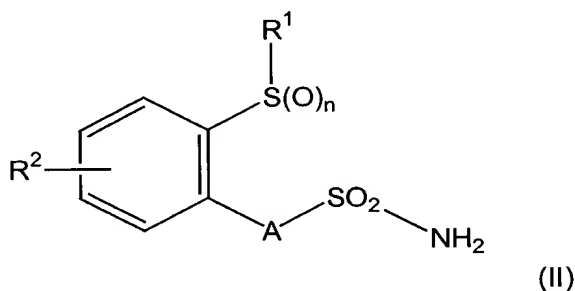


wherein

R⁴ represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methyl, ethyl, n- or i-propyl, or represents propenyl or propynyl, or represents methoxy, ethoxy, n- or i-propoxy, or represents cyclopropyl, and

R⁵ represents hydrogen, chloro or bromo, or represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methyl, ethyl, n- or i-propyl, or represents optionally fluoro- and/or chloro-substituted propenyl or propynyl, or represents optionally fluoro-, chloro-, cyano-, methoxy- or ethoxy-substituted methoxy, ethoxy, n- or i-propoxy, methylthio, ethylthio, n- or i-propylthio, or represents propenyloxy or cyclopropyl.

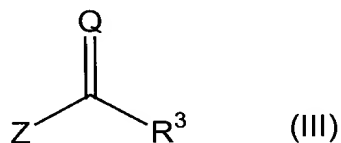
5. A process for preparing the sulfonylamino(thio)carbonyl of claim 1 comprising reacting an aminosulfonyl of the formula (II)



wherein

n, A, R¹ and R² are as defined in claim 1

with a (thio)carboxylic acid of the formula (III)



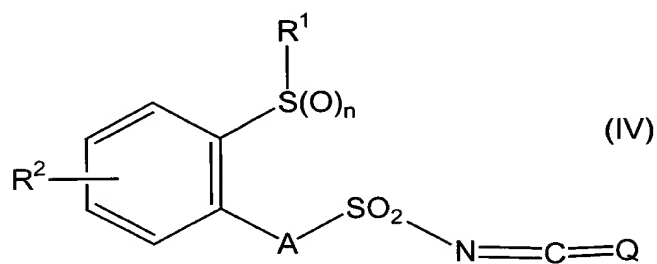
wherein

Q and R³ are as defined in claim 1 and

Z represents halogen, alkoxy, aryloxy or arylalkoxy,

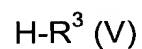
or

reacting a sulfonyl iso(thio)cyanate of the formula (IV)



wherein

n, A, Q, R¹ and R² are as defined above with a heterocycle of the formula (V)

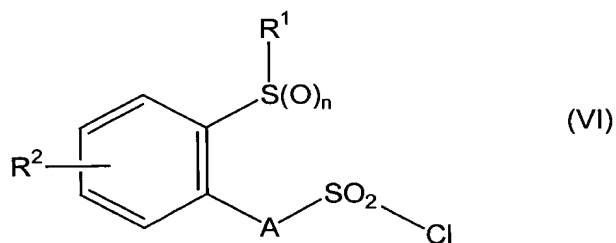


wherein

R³ is as defined above,

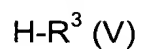
or

reacting a chlorosulfonyl of the formula (VI)



wherein

n, A, R¹ and R² are as defined above with a heterocycle of the formula (V)



wherein

R³ is as defined above and

a metal (thio)cyanate of the formula (VII)

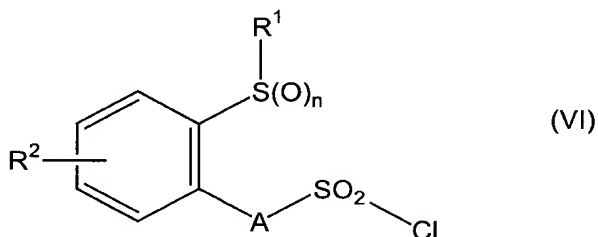


wherein

Q is as defined above,

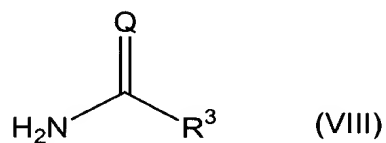
or

reacting a chlorosulfonyl of the formula (VI)



wherein

n, A, R¹ and R² are as defined above with a (thio)carboxamide of the formula (VIII)

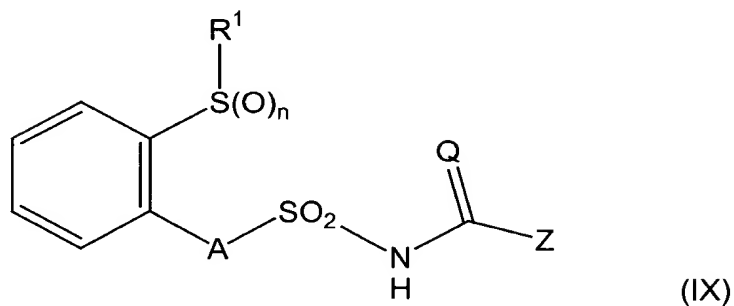


wherein

Q and R³ are as defined above,

or

reacting a sulfonylamino(thio)carbonyl of the formula (IX)

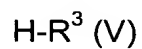


wherein

n, A, Q, R¹ and R² are as defined above and

B1 Z represents halogen, alkoxy, aryloxy or arylalkoxy,

with a heterocycle of the formula (V)

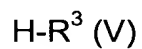


wherein

R³ is as defined above,

or

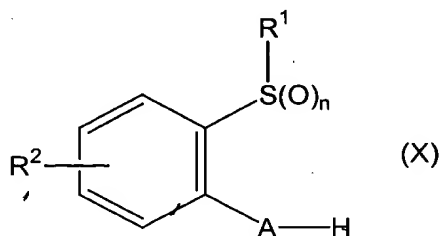
reacting a heterocycle of the formula (V)



wherein

R³ is as defined above,

with chlorosulfonyl isothiocyanate, optionally in the presence of a diluent, and reacting the adducts formed *in situ* with a benzene of the formula (X)



wherein

B₁ n , A , R^1 and R^2 are as defined above,

and collecting the reaction product.

6. (Amended) A herbicidal composition comprising at least one compound of claim 1 and at least one of extenders and surfactants.

B₂ 8. (Amended) A method for controlling at least one weed comprising applying at least one sulfonylamino(thio)carbonyl of claim 1 to the weed and/or its habitat.

9. (Amended) A method for preparing herbicidal composition comprising mixing at least one sulfonylamino(thio)carbonyl of claim 1 with at least one of extenders and surface-active agents.

Please add the following claim:

B₃ --13. The sulfonylamino(thio)carbonyl of claim 1, wherein

$n=0$;

A represents a single bond;

Q represents oxygen;

R^1 represents C_2H_5 ;

R^2 represents (6-)OCH₃ and
 R^3 represents

